

## COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (Includes Reference to Provisional and PCT International Applications)

ATTORNEY'S DOCKET NUMBER 002076-007

DDOLONGED	<b>CULTURING OF</b>	A \$7T A BT	CHICKEN	DDIMODDIAL	CEDM	CELLS	(DCCa)	TICINIC	CDECIEIC
PRULUNGED	COLI OKING OF	AVIAN	(CHICKEN)	PRIMORDIAL	GEKM	CELLO	(PGCS)	OSING	SPECIFIC

s a below named inventor, I hereby declare that: y residence, post office address and citizenship are as stated below next to my name; selieve I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if ural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:							
PROLONGE	ROLONGED CULTURING OF AVIAN (CHICKEN) PRIMORDIAL GERM CELLS (PGCs) USING SPECIFIC						
GROWTH F	ACTORS, USE 1	THEREOF TO PRODUCE CHIM	MERIC AVIANS (CHICKENS)				
the s	the specification of which (check only one item below):						
	is attached hereto.						
X	was filed as Uni	ted States application	FEB 2 5 1999 &				
	Number <u>09/12</u>	27,624					
	on August 3,	1998	RADEMARI	<u> </u>			
	and was amende	ed .					
	on		(if applicable).				
	was filed as PC	Γ international application					
	Number						
	on						
		d under PCT Article 19					
	on		(if applicable).				
I acknowled 37, Code of I hereby cla or inventor' America liss internationa	I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.  I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a)-(e) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:						
RIOR FORE	IGN/PCT APPL	ICATION(S) AND ANY PRIOF	RITY CLAIMS UNDER 35 U.S.	C. §119:			
COU (if PCT, ind	NTRY icate "PCT")	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. §119			
				YesNo			
				YesNo			
		24					
				YesNo			
				YesNo			
hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below.							
(App	lication Number)	(	Filing Date)	· · ·			
(App	(Application Number) (Filing Date)						



(Includes Reference to Provisional and PCT International Applications)



ATTORNEY'S DOCKET NO.

002076-007

I hereby claim the benefit under Title 35, United States Code, §120 of any United States applications(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Office all information known to me to be material to the patentability as defined in Title 37, Code of Federal Regulations §1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

PRIOR U.S. APPLICATIONS OR PC	T INTERNATIONAL APP	ICATIONS DESIGNATING THE U.S. FOR BEN	EFIT UNDER	35 U.S.C. 12	0:		
	U.S. APPLICATION	NS	ST	ATUS (check	one)		
U.S. APPLICATION NUM	/BER	U.S. FILING DE PE	PATENTED	PENDING	ABANDONED		
08/905,773		( )		·	,		
		FEB 2 5 1989 2					
	The same of the sa						
PCT A	APPLICATIONS DESIGN	TING THE U.S.					
PCT APPLICATION NO.	PCT FILING DA	U.S. APPLICATION NUMBERS G DATE ASSIGNED (if any)					
	rewith and to file, pro	prosecute said application and to transac ecute and to transact all business in conne			nt and		

William L. Mathis	17,337	George A. Hovanec, Jr.	28,223	Peter K. Skiff	31,917
Peter H. Smolka	15,913	James A. LaBarre	28,632	Richard J. McGrath	29,195
Robert S. Swecker	19,885	E. Joseph Gess	28,510	Matthew L. Schneider	32,814
Platon N. Mandros	22,124	R. Danny Huntington	27,903	Michael G. Savage	32,596
Benton S. Duffett, Jr.	22,030	Eric H. Weisblatt	30,505	Gerald F. Swiss	30,113
Norman H. Stepno	22,716	James W. Peterson	26,057	Michael J. Ure	33,089
Ronald L. Grudziecki	24,970	Teresa Stanek Rea	30,427	Charles F. Wieland III	33,096
Frederick G. Michaud, Jr.	26,003	Robert E. Krebs	25,885	Bruce T. Wieder	33,815
Alan E. Kopecki	25,813	William C. Rowland	30,888	Todd R. Walters	34,040
Regis E. Slutter	26,999	T. Gene Dillahunty	25,423		
Samuel C. Miller, III	27,360	Patrick C. Keane	32,858		
Ralph L. Freeland, Jr.	16,110	Bruce J. Boggs, Jr.	32,344		
Robert G. Mukai	28,531	William H. Benz	25,952		

and: Robin L. Teskin, Registration No. 35,030

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Burns, Doane, Swecker & Mathis, L.L.P.

P.O. Box 1404

Alexandria, Virginia 22313-1404

Address all telephone calls to: Robin L. Teskin

at (703) 836-6620.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Page 2 of 3 (09/98

COMBINED DECLARATION FOR PATENT APPLICATION AND POW		ITINUED) ATTOR	NEY'S DOCKET NO.
(Includes Referenc to Provisional and PCT Int rnational Application	ns) //	Z002076-0	007
FULL NAME OF SOLE OR FIRST INVENTOR	SIGNATURE /	1 1000	DATE
F. Abel Ponce de León	Town the state of		19/21/98
RESIDENCE		CITIZE	NSHIP / /
St. Paul, Minnesota 55127		USA	
POST OFFICE ADDRESS 27 S. Long Lake Trl, North	h Oaks, MN 5512	27	
FULL NAME OF SECOND JOINT INVENTOR, IF ANY	SIGNATURE	20 00	DATE
Catherine Blackwell	1		10/7/98
RESIDENCE		CITIZE	NSHIP
Warren, Massachusetts 01083		USA	
POST OFFICE ADDRESS			- <del></del>
285 Cutler Road, Warren, Massachusetts 01083			
FULL NAME OF THIRD JOINT INVENTOR, IF ANY	SIGNATURE		DATE
Xiu Ying Gao			<u>  </u>
RESIDENCE		CITIZE	NSHIP
S. Deerfield, Massachusetts 01373			
POST OFFICE ADDRESS			•
14 Ward Avenue, S. Deerfield, Massachusetts 01373		$\searrow$ $\land$	
FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	SIGNATURE	ـــال إ	DATE
James M. Robl	1 mm	V OK	19/00/90
RESIDENCE	( )	CITIZEI	NSHIP / /
Belchertown, Massachusetts 01007	/	USA	
POST OFFICE ADDRESS \	. 1	•	
196 Old Enfield Road, Belchertown, Massachusetts 01007			
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
Steven L. Stice	1 On (9)		1192-148
RESIDENCE	- 0	CITIZEI	NSHIP
Belchertown, Massachusetts 01007		USA	
POST OFFICE ADDRESS			
468 Amherst Road, Belchertown, Massachusetts 01007	SIGNATURE /	- 1	DATE
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	SIGNATURE	7 (//	9/28/98
D. Joseph Jerry RESIDENCE	1 W you	CITIZEI	1/~ #/ [8
	( /		1311II
Shutesbury, Massachusetts 01072 POST OFFICE ADDRESS		USA	
W. Pelham Road, Shutesbury, Massachusetts 01072  FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
TOBE MINUE OF BEYENMINGHI INVENTORY II III			
RESIDENCE	<u> </u>	CITIZEI	NSHIP
POST OFFICE ADDRESS	-	<u> </u>	
FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
RESIDENCE	<u></u>	CITIZE	NSHIP
POST OFFICE ADDRESS		· · · · · · · · · · · · · · · · · · ·	·/
FULL NAME OF NINTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
RESIDENCE		CITIZE	NSHIP
POST OFFICE ADDRESS			
I .			

## COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (Includ s R ference to Provisional and PCT International Applications)

ATTORNEY'S DOCKET NUMBER 002076-007

As a below named inventor, I hereby declare that:

I believe I am	My residence, post office address and citizenship are as stated below next to my name; believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if lural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:						
•	•	•	ORDIAL GERM CELLS (PGCs)				
	GROWTH FACTORS, USE THEREOF TO PRODUCE CHIMERIC AVIANS (CHICKENS)						
	the specification of which (check only one item below):						
_	is attached here	to.					
X		ited States application	FEB 2 5 1999				
		27,624	RADEMARIN				
	and was amende	1998	MUEWELL				
			(if applicable).				
_							
L		T international application					
		ed under PCT Article 19					
		ed under PCT Article 19	(if applicable).				
I hereby stat amended by	e that I have rev any amendment	iewed and understand the content referred to above.	ts of the above-identified specificat	ion, including the claims, as			
I acknowled 37, Code of	ge the duty to dis Federal Regulat	sclose to the Office all informations, §1.56.	on known to me to be material to pa	atentability as defined in Title			
or inventor's America list international	I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a)-(e) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:						
PRIOR FORE	IGN/PCT APPL	ICATION(S) AND ANY PRIO	RITY CLAIMS UNDER 35 U.S.	C. §119:			
COU (if PCT, ind	NTRY cate "PCT")	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. §119			
				YesNo			
-				YesNo			
				YesNo			
				YesNo			
				YesNo			
I hereby clain	the benefit unde	er Title 35, United States Code §	119(e) of any United States provis	ional application(s) listed below.			
(App	(Application Number) (Filing Date)						
(App	(Application Number) (Filing Date)						



## COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (CONTINUED) (Includes Reference to Provisional and PCT International Applications)

ATTORNEY'S DOCKET NO.

002076-007

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PRIOR U.S. APPLICATIONS OR P	CT INTERNATION	AL APPLICATIONS	DESIGNATING THE U.S. FOR BEN	IEFIT UNDER	35 U.S.C. 12	0:
	U.S. APPL	ICATIONS		ST	ATUS (check	one)
U.S. APPLICATION NU	MBER		U.S. FILING DATE	PATENTED	PENDING	ABANDONED
08/905,773	08/905,773					
- <del></del>			5			
РСТ	APPLICATIONS D	ESIGNATING THE	u.s.			
PCT APPLICATION NO.	PCT FILI	NG DATE	U.S. APPLICATION NUMBERS ASSIGNED (if any)			
				;		

I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:

William L. Mathis	17,337	George A. Hovanec, Jr.	28,223	Peter K. Skiff	31,917
Peter H. Smolka	15,913	James A. LaBarre	28,632	Richard J. McGrath	29,195
Robert S. Swecker	19,885	E. Joseph Gess	28,510	Matthew L. Schneider	32,814
Platon N. Mandros	22,124	R. Danny Huntington	27,903	Michael G. Savage	32,596
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Alan E. Kopecki	25,813	William C. Rowland	30,888	Todd R. Walters	34,040
Regis E. Slutter	26,999	T. Gene Dillahunty	25,423		
Samuel C. Miller, III	27,360	Patrick C. Keane	32,858		
Ralph L. Freeland, Jr.	16,110	Bruce J. Boggs, Jr.	32,344		
Dobert G. Mukai	28 531	William H Renz	25 052		

and: Robin L. Teskin, Registration No. 35,030

Address all correspondence to:

Robin L. Teskin

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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> Page 2 of 3 (09/98)

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COMBINED DECLARATION FOR PATT APPLICATION AND POV		ATTORNEY'S	DOCKET NO.
(Includes Reference to Provisional and PCT International Application	ons)	002076-007	
FULL NAME OF SOLE OR FIRST INVENTOR	SIGNATURE		DATE
F. Abel Ponce de León			
RESIDENCE		CITIZENSHIP	•
St. Paul, Minnesota 55108		USA	·
POST OFFICE ADDRESS			
2180 Folwell Avenue, St. Paul, Minnesota 55108  FULL NAME OF SECOND JOINT INVENTOR, IF ANY	SIGNATURE		DATE
Catherine Blackwell	J.G. W. L. G.		22
RESIDENCE		CITIZENSHIP	•
Warren, Massachusetts 01083		USA	
POST OFFICE ADDRESS			
285 Cutler Road, Warren, Massachusetts 01083	·		<b>6</b>
FULL NAME OF THIRD JOINT INVENTOR, IF ANY	SIGNATURE		DATE
Xiu Ying Gao XIW Jing Gao	- 406		01/25/99
RESIDENCE U ()	22	CITIZENSHIP	
S. Deerfield, Massachusetts 01373	Mass 02032	Chins	296
FULL NAME OF THIRD JOINT INVENTOR, IF ANY Xiu Ying Gao  RESIDENCE  S. Deerfield, Massachusetts 01373  POST OFFICE ADDRESS  14 Ward Avenue, S. Deerfield, Massachusetts 01373  FULL NAME OF FOURTH JOINT INVENTOR, IF ANY  Larger M. Robl	ar E Walledo Mars	0 202 2	
FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	SIGNATURE	2052	DATE
James M. Robl			
RESIDENCE		CITIZENSHIP	)
Belchertown, Massachusetts 01007		USA	
POST OFFICE ADDRESS			
196 Old Enfield Road, Belchertown, Massachusetts 01007			
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
Steven L. Stice	<u> </u>	Lamiaryiaiyi	
RESIDENCE		CITIZENSHIP	
Belchertown, Massachusetts 01007  POST OFFICE ADDRESS		USA	
468 Amherst Road, Belchertown, Massachusetts 01007			
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
D. Joseph Jerry			
RESIDENCE		CITIZENSHIP	
Shutesbury, Massachusetts 01072		USA	
POST OFFICE ADDRESS			
W. Pelham Road, Shutesbury, Massachusetts 01072	SIGNATURE		DATE
FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
RESIDENCE		CITIZENSHIP	,
TABLE TO THE TABLE		1	
POST OFFICE ADDRESS	* * * * * * * * * * * * * * * * * * * *	<u> </u>	
FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY	SIGNATURE		DATE
RESIDENCE		CITIZENSHIP	1
		I	
POST OFFICE ADDRESS		,	
FULL NAME OF NINTH JOINT INVENTOR, IF ANY	SIGNATURE	<u> </u>	DATE
FOLL MAINE OF MINTE JOHN INVENTOR, IF ANT			<del>-</del>
RESIDENCE		CITIZENSHIP	)
POST OFFICE ADDRESS			

\*#3



Patent Attorney's Docket No. <u>002076-007</u>

Applicant or Pa	atentee: F. Abel Ponce de Leon et al.
Application or	Patent No.: 09/127,624
Filed or Issued	: August 3, 1998
For: PROLON	GED CULTURING OF AVIAN (CHICKEN) PRIMORDIAL GERM CELLS (PGCs) USING
SPECIFIC GRO	WTH FACTORS, USE THEREOF TO PRODUCE CHIMERIC AVIANS (CHICKEN)
	FIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY (37 C.F.R. §§ 1.9(f) AND 1.27(d)) - NONPROFIT ORGANIZATION
l hereby decla identified belov	are that I am an official empowered to act on behalf of the nonprofit organization w:
NAME OF ORG	GANIZATION UNIVERSITY OF MASSACHUSETTS, A PUBLIC INSTITUTION OF
HIGHER EDUC	ATION OF THE COMMONWEALTH OF MASSACHUSETTS, AS REPRESENTED BY
ITS AMHERST	CAMPUS
ADDRESS OF	ORGANIZATION Office of Vice Chancellor for Research at Amherst,
Amherst, Mass	sachusetts 01002
TYPE OF ORG	ANIZATION
[X]	University or other institution of higher education
[ ]	Tax exempt under Internal Revenue Service Code (26 U.S.C. §§ 501(a) and 501(c)(3))
[ ]	Nonprofit scientific or educational under statute of state of The United States of America
	(Name of state)
[ ]	(Citation of statute) Would qualify as tax exempt under Internal Revenue Service Code
[ ]	(26 U.S.C. §§ 501(a) and 501(c)(3)) if located in The United States of America Would qualify as nonprofit scientific or educational under statute of The United States of America if located in The United States of America
	(Name of state)
	(Citation of statute)
as defined in 3 of Title 35, Uni AVIAN (CHICK THEREOF TO	e that the nonprofit organization identified above qualifies as a nonprofit organization 7 C.F.R. § 1.9(e) for purposes of paying reduced fees under Sections 41(a) and 41(b) ted States Code, with regard to the invention entitled PROLONGED CULTURING OF EN) PRIMORDIAL GERM CELLS (PGCs) USING SPECIFIC GROWTH FACTORS, USE PRODUCE CHIMERIC AVIANS (CHICKENS) by inventor(s) F. Abel Ponce de Léon, well, Xiu Ying Gao, James M. Robl, Steven L. Stice and D. Joseph Jerry described
[ ]	the specification filed herewith
[X]	Application No. 09/127,624 , filed August 3, 1998 .
[ ]	Patent No, issued

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.



Application No. <u>09/127,624</u> Attorney's Docket No. <u>002076-007</u>

If the rights held by the above-identified nonprofit organization are not exclusive, each individual, concern, or organization having rights to the invention is listed below,\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an individual inventor under 37 C.F.R. § 1.9(c), or by any concern that would not qualify as either a small business concern under 37 C.F.R. § 1.9(d) or a nonprofit organization under 37 C.F.R. § 1.9(e).

\*NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention averring to their status as small entities. (37 C.F.R. § 1.27.)

FULL NAME		
ADDRESS		
[ ] individual	[ ] small business concern	[ ] nonprofit organization
FULL NAME		
ADDRESS		
[ ] individual	[ ] small business concern	[ ] nonprofit organization
resulting in loss of entitlemen	nt to small entity status prior t maintenance fee due after the	t, notification of any change in status to paying, or at the time of paying, the date on which status as a small entity
statements made on information were made with the knowledge fine or imprisonment, or both, such willful false statements thereon, or any patent to which	on and belief are believed to be a that willful false statements a under Section 1001 of Title 1 may jeopardize the validity ch this verified statement is d	own knowledge are true and that all true; and further that these statements and the like so made are punishable by 18 of the United States Code; and that of the application, any patent issuing irected.
NAME OF PERSON SIGNING	Joseph-F.X. McGuirl	- One for
TITLE IN ORGANIZATION	ector, CVIP	
ADDRESS OF PERSON SIGNI	NG <u>University of Massachuse</u>	tts, 365 Plantation Street
Suite 130, Worcester, MA 0	1605	· · · · · · · · · · · · · · · · · · ·
SIGNATURE APPL	al A	DATE 8 R. 199